**ORDINANCE NO. 20210603-059**

**AN ORDINANCE REPEALING AND REPLACING DIVISION 1 OF ARTICLE 1 OF CITY CODE CHAPTER 25-12 RELATING TO THE INTERNATIONAL BUILDING CODE; REPEALING AND REPLACING ARTICLE 10 OF CITY CODE CHAPTER 25-12 RELATING TO THE INTERNATIONAL EXISTING BUILDING CODE; REPEALING AND REPLACING ARTICLE 13 OF CITY CODE CHAPTER 25-12 RELATING TO ADMINISTERING TECHNICAL CODES; AMENDING CHAPTER 25-12 RELATING TO FLOOD LOADS AND HAZARD AREAS; AMENDING CHAPTER 25-7 RELATING TO FLOOD LOADS AND HAZARD AREAS; WAIVING SECTIONS 25-1-501 AND 25-1-502 RELATING TO AMENDMENTS; AND CREATING OFFENSES.**

**BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:**

**PART 1.** City Code Chapter 25-12 (*Technical Codes*) is amended to repeal and replace Division 1 of Article 1 (*Building Code*) to read:

***DIVISION 1. INTERNATIONAL BUILDING CODE AND LOCAL AMENDMENTS***

**§ 25-12-1 INTERNATIONAL BUILDING CODE.**

(A) The International Building Code, 2021 Edition, published by the International Code Council ("2021 International Building Code") is adopted and incorporated by reference into this section with the deletions in Subsection (B) and the amendments in Section 25-12-3 (*Local Amendments to the International Building Code*).

(B) The following provisions of the 2021 International Building Code are deleted.

| | | | |
|---|---|---|---|
| 101.4.1 | 305.2.3 | 414.1.3 | 1108.6.4.2 |
| 101.4.2 | 308.2.3 | 427.6 | 1301.1 |
| 101.4.3 | 308.2.4 | Chapter 9 | 1507.8 plus subsections |
| 103 plus subsections | 308.3 | 1008.2.1 | 1507.9 plus subsections |
| 104.2.1 | 308.3.1.1 | 1009.3 | 1607.8.2 |
| 105.1.1 | 308.3.2 | 1010.1.2 | 1612 plus subsections |

| | | | |
|---|---|---|---|
| 105.2 | 308.5 | 1010.2.7 | 2901.1 |
| 107.2.6 | 308.5.1 | 1010.3.3 | 2902.2 |
| 110.3 | 308.5.3 | 1101.2 | 2902.6 |
| 112.3 | 308.5.4 | 1108.6.1.2 | 3102.5 |
| 113 plus subsections | 310.2 | 1108.6.2.2.2 | 3201.1 |
| 305.2 | 310.4.1 | 1108.6.2.3.2 | 3202.1 |
| 305.2.2 | 406.4.3 | 1108.6.3 | Table 2901.1 Footnote (e) |
| Table 1004.5 | | | |

(C) The following definition is deleted from Section 202.2.1 (*General Definitions*) of the 2021 International Building Code:

FOSTER CARE FACILITIES.

(D) The city clerk shall file a copy of the 2021 International Building Code with the official ordinances of the City.

**§ 25-12-2 CITATIONS TO THE BUILDING CODE.**

In the City Code, "Building Code" means the 2021 International Building Code adopted in Section 25-12-1 (*International Building Code*) as amended by Section 25-12-3 (*Local Amendments to the International Building Code*). In this article, "this code" means the Building Code.

**§ 25-12-3 LOCAL AMENDMENTS TO THE INTERNATIONAL BUILDING CODE.**

Each provision in this section is a substitute for the identically numbered provision deleted in Section 25-12-1(B) (*International Building Code*) or is an addition to the 2021 International Building Code.

[A] 101.4.1 Gas. The provisions of the International Fuel Gas Code and the Plumbing Code shall apply to the installation of gas piping from the point of delivery, gas appliances, and related accessories as covered in this code. The Plumbing Code supersedes the International Fuel Gas Code to the extent of conflict. These requirements

apply to gas piping systems extending from the point of delivery to the inlet connections of appliances and the installation and operation of residential and commercial gas appliances and related accessories.

[A] 101.4.2 Mechanical. The provisions of the International Mechanical Code and the Mechanical Code shall apply to the installation, alterations, repairs, and replacement of mechanical systems, including equipment, appliances, fixtures, fittings, and/or appurtenances, including ventilating, heating, cooling, air conditioning, and refrigeration systems, incinerators, and other energy related systems. The Mechanical Code supersedes the International Mechanical Code to the extent of conflict.

[A] 101.4.3 Plumbing. The provisions of the International Plumbing Code and the Plumbing Code shall apply to the installation, alteration, repairs, and replacement of plumbing systems, including equipment, appliances, fixtures, fittings, and appurtenances, and where connected to a water or sewage system and all aspects of a medical gas system. The Plumbing Code supersedes the International Plumbing Code to the extent of conflict. The provisions of the International Private Sewage Disposal Code and the Plumbing Code shall apply to private sewage disposal systems. The Plumbing Code supersedes the International Private Sewage Code to the extent of conflict.

101.4.8 Wildland-Urban Interface. The provisions of the International Wildland-Urban Interface Code shall apply to matters governing the construction, alteration, movement, repair, maintenance and use of any building, structure or premises within the wildland-urban interface areas in this jurisdiction.

101.4.9 Building Criteria Manual. Additional information on procedures and rules for administration of this code are available in the Building Criteria Manual.

**Section 103 BUILDING OFFICIAL**

103.1 Building Official. The building official administers, enforces, and interprets this code. The building official may designate one or more deputy building officials.

[A] 104.2.1 Determination of Substantially Improved or Substantially Damaged Existing Buildings and Structures in Flood Hazard Areas. For applications for reconstruction, rehabilitation, repair, alteration, addition or other improvement of existing buildings or structures located in flood hazard areas, the building official shall examine or cause to be examined the construction documents and shall prepare a finding with regard to the value of the proposed work. If the work is a substantial improvement as defined in Section 25-12-52 (*Definitions*), the proposed work shall comply with Article 3 (*Flood Hazard Areas*).

[A] 105.1.1 Annual Permit. Instead of an individual permit for each alteration to an already approved electrical, gas, mechanical or plumbing installation, and minor building

alterations and repairs, the building official is authorized to issue an annual permit upon application to any person, firm or corporation regularly employing one or more qualified trade persons in the building, structure or on the premises owned or operated by the applicant for the permit. The facility shall maintain records on all work performed under the annual permit in accordance with Section 105.1.2 (*Annual Permit Records*).

105.1.1.1 Authorized Scope of Work. See Building Criteria Manual, Section 1.1.2 (*Building Inspection Processes*) for scope of work authorized under the annual permit.

[A] 105.2 Work Exempt from Permit. A permit is not required for the work described in this provision. Work exempt from a permit shall still comply with this code and all other applicable laws and City Code requirements.

Building:

1. One-story detached accessory structures used as tool and storage sheds, playhouses, shade cloth structures constructed for outdoor covered areas that are not A2 or E occupancies, and similar uses, provided the floor area is not greater than 120 square feet (11 $m^2$); provided they are not located within a flood hazard area.

2. Fences not over 7 feet (2,134 mm) high; provided they are not located within a flood hazard area.

3. Oil derricks; provided they are not located within a flood hazard area.

4. Retaining walls that are not over 4 feet (1,219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids; provided they are not located within a flood hazard area.

5. Water tanks supported directly on grade if the capacity is not greater than 5,000 gallons (18,925 L) and the ratio of height to diameter or width is not greater than 2:1; provided they are not located within a flood hazard area.

6. Sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade, and not over any basement or story below and are not part of an accessible route; provided they are not located within a flood hazard area.

7. Painting, papering, tiling, carpeting, cabinets, counter tops, and similar finish work.

8. Temporary motion picture, television, and theater stage sets and scenery.

9. Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 24 inches (610 mm) deep, are not greater than 5,000 gallons (18,925 L) and

are installed entirely above ground; provided they are not located within a flood hazard area.

10. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems; provided they are not located within a flood hazard area.

11. Swings and other playground equipment accessory to detached one- and two-family dwellings; provided they are not located within a flood hazard area.

12. Window awnings in Group R-3 and U occupancies, supported by an exterior wall that do not project more than 54 inches (1,372 mm) from the exterior wall and do not require additional support.

13. Non-fixed and movable fixtures, cases, racks, counters, and partitions not over 5 feet 9 inches (1,753 mm) in height.

14. Repair and replacement to gypsum board and backer board that are not part of a fire-resistance-rated wall, a shear assembly, or wet areas if it is limited to a maximum of 96 square feet.

15. Emergency removal of water damaged material such as, but not limited to gypsum board, insulation, wood paneling, etc., in order to avoid health hazard issues; a permit is required for the repairs.

16. Repair to exterior siding that is not part of a fire-rated assembly wall or shear assembly if it is limited to a maximum of 96 square feet.

17. Other work as determined by the building official.

Electrical:

1. Repairs and maintenance: Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

2. Radio and television transmitting stations: The provisions of this code shall not apply to electrical equipment used for radio and television transmissions, but do apply to equipment and wiring for a power supply and the installations of towers and antennas.

3. Temporary testing systems: A permit shall not be required for the installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.

4. Electrical work exempt from permit within the Electrical Code.

5. Other work as determined by the building official.

Mechanical:

1. Exemptions authorized in the Mechanical Code.

2. Other work as determined by the building official.

Plumbing:

1. Exemptions authorized in the Plumbing Code.

2. Other work as determined by the building official.

105.5 Time Limits. Article 13 (*Administration of Technical Codes*) of this chapter establishes permit application time limits and requirements applicable to permit expiration and reactivation, including a review fee for expired permits.

[A] 107.2.6 Site Plan. The construction documents submitted with the application for permit shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, distances from lot lines, the established street grades and the proposed finished grades, and as applicable, flood hazard areas, floodways, and design flood elevations; and it shall be drawn in accordance with an accurate boundary line survey. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. For a building or structure involving below-grade construction, the site plan shall show the location of proposed earth retention system components allowed under Section 3202.1.4 (*Earth Retention System Components*). The building official is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted.

108.5 Temporary Earth Retention Systems. Temporary earth retention system components used to facilitate below-grade construction of a building or structure shall conform to Sections 1811 (*Earth Retention Systems*) and Section 3202.1.4 (*Earth retention system components*).

109.7 Plan Review Fees. An applicant shall pay a plan review fee, adopted by separate ordinance, when plans and specifications are submitted for review under Section 107 (*Submittal Documents*). The building official shall charge an additional plan review fee if plans are incomplete or changed so as to require additional plan review. The plan review fees referenced in this section are in addition to the permit fees referenced in Section 109.1 (*Payment of fees*).

110.3 Required inspections. The building official, upon notification, shall make inspections set forth in Sections 110.3.1 through 110.3.12 and the Building Criteria Manual.

112.3 Authority to Disconnect Service Utilities. The building official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property, where one or more circumstances listed in Section 15-9-101(A)(2) (*Basis for Termination of Service*) exist, or where such utility connection has been made without the approval required by Section 112.1 or 112.2. The building official shall provide notice in accordance with Section 15-9-106 (*Notice of Service Disconnection*) of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner or the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter in accordance with Section 15-9-106 (*Notice of Service Disconnection*).

113 Building and Fire Code Board of Appeals. Regulations regarding the Building and Fire Code Board of Appeals are found in Chapter 2-1 (*City Boards*).

**Section 202 Definitions**.

202.1 Supplemental definitions. The definitions in this subsection apply throughout this code and supplement the definitions in Section 202 (*General Definitions*) in the 2021 International Building Code.

BED AND BREAKFAST. A private residence having a limited number of sleeping rooms which are available for transient guests who have paid for accommodations. For the different classifications of bed and breakfast structures refer to Section 25-2-781 (*Bed and Breakfast Residential Use Structures Classified*).

START OF CONSTRUCTION. The date a permit is issued for new construction or substantial improvements to existing structures if construction, repair, reconstruction, rehabilitation, addition, placement or other improvement starts within 180 days from the date the permit is issued. Construction starts when permanent construction of a building (including a manufactured home) is first placed and includes pouring a slab or footing, installing pilings, or constructing columns. Permanent construction does not include preparing land (clearing, excavating, grading, or filing); installing streets or walkways; excavating for a basement, footing, pier, or foundation; or erecting temporary forms or installing accessory buildings not occupied as dwelling units or not part of the main building. For a substantial improvement, construction starts when a wall, ceiling, floor, or other structural part of a building is altered even if the alteration does not affect the external dimensions of the building.

SUBSTANTIAL DAMAGE. Damage of any origin sustained by a structure, whereby the cost of restoring the structure to its before-damage condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

305.2 Group E, Day Care Facilities. This group includes buildings and structures, or portions thereof occupied by more than six children older than 2 ½ years of age who receive educational, supervision, or personal care services for fewer than 24 hours per day.

305.2.2 Six or Fewer Children. A facility having six or fewer children receiving such day care shall be classified as part of the primary occupancy.

305.2.3 Six or Fewer Children in a Dwelling Unit. A facility such as the above within a dwelling unit and having six or fewer children receiving such day care shall be classified as a Group R-3 occupancy or shall comply with the Residential Code.

308.2.3 Seven to 16 Persons Receiving Custodial Care. A facility housing not fewer than seven and not more than 16 persons receiving custodial care shall be classified as Group R-4.

308.2.4 Six or Fewer Persons Receiving Custodial Care. A facility with six or fewer persons receiving custodial care shall be classified as Group R-3 or shall comply with the Residential Code provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3 or Section P2904 of the Residential Code.

308.3 Institutional Group I-2. Institutional I-2 occupancy shall include buildings and structures used for medical care on a 24-hour basis for more than six persons who are incapable of self-preservation. This group shall include, but not be limited to, the following: detoxification facilities; hospitals; nursing homes; and psychiatric hospitals.

308.3.1.1 Condition 1. This occupancy condition shall include facilities that provide nursing and medical care but do not provide emergency care, surgery, obstetrics or in-patient stabilization units for psychiatric or detoxification, including but not limited to nursing homes.

308.3.2 Six or Fewer Persons Receiving Medical Care. A facility with six or fewer persons receiving medical care shall be classified as Group R-3 or shall comply with the Residential Code provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3 or Section P2904 of the Residential Code.

308.5 Institutional Group I-4, Day Care Facilities. Institutional Group I-4 shall include buildings and structures occupied by more than six persons of any age who receive custodial care for fewer than 24 hours per day by persons other than parents or guardians, relatives by blood, marriage, or adoption, and in a place other than the home of the

person cared for. This group shall include, but not be limited to, the following: adult day care and child day care.

308.5.1 Classification as Group E. A child care facility that provides care for more than six but no more than 100 children 2 ½ years or less of age, where the rooms in which the children are cared for are located on a level of exit discharge serving such rooms and each of these child care rooms has an exit door directly to the exterior, shall be classified as Group E.

308.5.3 Six of Fewer Persons Receiving Care. A facility having six or fewer persons receiving custodial care shall be classified as part of the primary occupancy.

308.5.4 Six or Fewer Persons Receiving Care in a Dwelling Unit. A facility such as the above within a dwelling unit and having six or fewer persons receiving custodial care shall be classified as a Group R-3 occupancy or shall comply with the International Residential Code, provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3 (*NFPA 13D sprinkler systems*) or with Section P2904 of the Residential Code.

310.2 Residential Group R-1. Residential occupancies containing sleeping units where the occupants are primarily transient in nature including: boarding houses (transient) with more than 10 occupants, congregate living facilities (transient) with more than 10 occupants, hotels (transient), motels (transient), and bed and breakfast establishments.

Exception. Compliance with Section 903.2.8 (Group R) is not required for a single structure Group R-1 Bed and Breakfast occupancy described in Section 25-2-781 (*Bed and Breakfast Residential Use Structures Classified*) when the owner resides within the Bed and Breakfast occupancy and provided that:

1. The structure is a detached single-family home that was legally constructed and occupied as a single-family residence prior to January 1, 2006;

2. The total number of sleeping rooms did not increase after January 1, 2006;

3. The residence is protected by a monitored residential style fire/security system with an appropriate automatic smoke detection system installed throughout the residence with occupant notification devices in accordance with Section 907.5 (*Occupant notification systems*); and

4. The residential style fire/security system shall be inspected, tested and maintained in accordance with Section 907.8 (*Inspection, testing and maintenance*).

310.4.1 Care Facilities within a Dwelling. Care facilities for six or fewer persons receiving care that are within a single-family dwelling are permitted to comply with the Residential Code, provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3 (*NFPA 13D sprinkler systems*) or with Section P2904 of the Residential Code.

Exception: Compliance with Section 903.3.1.3 (*NFPA 13D sprinkler systems*) is not required for adult care and child care facilities that are within the proprietor's single-family home; provided that the home was permitted prior to October 1, 2010.

406.4.3 Ramps. The minimum width and depth of parking spaces and vehicle circulation aisles shall be in accordance with the Austin Transportation Criteria Manual, Table 9-1 or Table 9-2 (residential and low-use garages only). Vehicle ramps shall not be considered as required exits unless pedestrian facilities are provided. Vehicle ramps that are utilized for vertical circulation as well as for parking shall not exceed a slope of 1 unit vertical in 15 unit's horizontal (6.67-percent slope).

414.1.3 Information Required. Separate floor plans shall be submitted for buildings and structures with an occupancy in Group H, identifying the locations of anticipated contents and processes, to reflect the nature of each occupied portion of every building and structure. The floor plan shall identify the hazards associated with the contents and processes. A report identifying hazardous materials including, but not limited to, materials representing hazards that are classified in Group H to be stored or used, shall be submitted and the methods of protection from such hazards shall be indicated on the construction documents. The building official or fire marshal may also require a technical opinion that addresses the adequacy of the protective measures provided. The opinion and report shall be prepared by a qualified individual, firm or corporation approved by the building official and fire marshal, and shall be provided without charge to the City.

503.1.4 Occupied Roofs. A roof level or portion thereof shall be permitted to be used as an occupied roof provided the occupancy of the roof is an occupancy that is permitted by Table 504.4 for the story immediately below the roof. The area of the occupied roofs shall not be included in the building area as regulated by Section 506. An occupied roof shall not be included in the building height or number of stories as regulated by Section 504, provided that the penthouses and other enclosed rooftop structures comply with Section 1511.

Exceptions:

1. The occupancy located on an occupied roof shall not be limited to the occupancies allowed on the story immediately below the roof where the building is equipped throughout with an automatic sprinkler system in

accordance with Section 903.3.1.1 or 903.3.1.2 and occupant notification in accordance with Sections 907.5.2.1 and 907.5.2.3 is provided in the area of the occupied roof. Emergency voice/alarm communication system notification per Section 907.5.2.2 shall also be provided in the area of the occupied roof where such system is required elsewhere in the building.

2. Assembly occupancies shall be permitted on roofs of open parking spaces of Type I or Type II construction, in accordance with the exception to Section 903.2.1.6.

3. An open noncombustible trellis or similar overhead shading device complying with the structural requirements of this code shall not be considered as a covering or roof provided that the trellis or shade has an evenly distributed net free area of 50 percent or greater.

503.1.4.2 Interstitial Spaces Beneath Rooftop Occupancies. When decks or other walking surfaces are constructed above a roof to facilitate rooftop occupancy, the space between the roof surface and the deck or walking surface shall be constructed in a manner that precludes the accumulation of material between the roof surface and the deck or walking surface and that prevents the introduction of ignition sources to the space, and allows for proper roof drainage.

**CHAPTER 9 FIRE PROTECTION AND LIFE SAFETY SYSTEMS.**

901.1 Scope. The provisions of this chapter shall specify where fire protection and life safety systems are required and shall apply to the design, installation and operation of fire protection and life safety systems. For those requirements, see Chapter 25-12, Article 7 (*Fire Code*).

**Table 1004.5**

**MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT**

| FUNCTION OF SPACE | OCCUPANT LOAD FACTOR[a] |
|---|---|
| Accessory storage areas, mechanical equipment room | 300 gross |
| Agricultural building | 300 gross |
| Aircraft hangars | 500 gross |
| Airport Terminal | |

| | |
|---|---|
| Baggage claim | 20 gross |
| Baggage handling | 300 gross |
| Concourse | 100 gross |
| Waiting areas | 15 gross |
| Assembly | |
| Gaming floors (keno, slots, etc.) | 11 gross |
| Exhibit Gallery and Museum | 30 net |
| Assembly with fixed seats | See Section 1004.5 |
| Assembly without fixed seats | |
| Concentrated | 7 net |
| Standing space or queuing space | 7 net |
| Unconcentrated (tables and chairs) | 15 net |
| Bowling centers, allow 5 persons for each lane including 15 feet of runway, and for additional areas | 7 net |
| Business areas | 100 gross |
| Courtrooms—other than fixed seating areas | 40 net |
| Day care | 35 net |
| Dormitories | 50 gross |
| Educational | |
| Classroom area | 20 net |
| Shops and other vocational room areas | 50 net |
| Exercise rooms | 50 gross |

| | |
|---|---|
| Group H-5 Fabrication and manufacturing areas | 200 gross |
| Industrial areas | 100 gross |
| Institutional areas<br>Inpatient treatment areas<br>Outpatient areas<br>Sleeping areas | <br>240 gross<br>100 gross<br>120 gross |
| Kitchens, commercial | 200 gross |
| Library<br>Reading rooms<br>Stack area | <br>50 net<br>100 gross |
| Mall buildings—covered and open | See section 402.8.2 |
| Mercantile<br>Storage, stock, shipping areas | 60 gross<br>300 gross |
| Parking garages | 200 gross |
| Residential | 200 gross |
| Skating rinks, swimming pools<br>Rink and pool<br>Decks | <br>50 gross<br>15 gross |
| Stages and platforms | 15 net |
| Warehouses | 500 gross |
| For SI: 1 square foot = 0.0929 m2.<br>a. Floor area in square feet per occupant | |

1008.2.1 Illumination Level Under Normal Power. The means of egress illumination level shall be not less than 1 foot-candle (11 lux) at the walking surface.

Exception: For auditoriums, theaters, concert or opera halls and similar assembly occupancies, the illumination at the walking surface is permitted to be reduced during performances by one of the following methods provided that the required illumination is automatically restored upon activation of a premises' fire alarm system:

1. Externally illuminated walking surfaces shall be permitted to be illuminated to not less than 0.2 foot-candle (2.15 lux).

2. Steps, landings and the sides of ramps shall be permitted to be marked with self-luminous materials in accordance with Sections 1025.2.1, 1025.2.2 and 1025.2.4 by systems listed in accordance with UL 1994; or in accordance with Section 1025.6.

1009.3 Stairways. In order to be considered part of an accessible means of egress, a stairway between stories shall have a clear width of 48 inches (1,219 mm) minimum between handrails and shall either incorporate an area of refuge within an enlarged floor-level landing or shall be accessed from an area of refuge complying with Section 1009.6 (*Areas of Refuge*). Exit access stairways that connect levels in the same story are not permitted as part of an accessible means of egress.

Exceptions:

1. Exit access stairways providing means of egress from mezzanines are permitted as part of an accessible means of egress.

2. Except for a building governed by Section 403 (*High-Rise Buildings*), the clear width of 48 inches (1,219 mm) between handrails is not required in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 (*NFPA 13 sprinkler systems*) or 903.3.1.2 (*NFPA 13R sprinkler systems*).

3. Areas of refuge are not required at exit access stairways where two-way communication is provided at the elevator landing in accordance with Section 1009.8 (*Two-way communication*).

4. Except for a building governed by Section 403 (*High-Rise Buildings*), the areas of refuge are not required at stairways in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 (*NFPA 13 sprinkler systems*) or 903.3.1.2 (*NFPA 13R sprinkler systems*).

5. Areas of refuge are not required at stairways serving open parking garages.

6. Areas of refuge are not required for smoke-protected assembly seating areas complying with Section 1030.6.2 (*Smoke-protected assembly seating*).

7. Areas of refuge are not required for stairways accessed from a refuge area in conjunction with a horizontal exit.

1010.1.2 Door Swing. Egress doors shall be of the pivoted or side-hinged swinging type.

Exceptions:

1. Private garages, office areas, factory and storage areas with an occupant load of 10 or less.

2. Group I-3 occupancies used as a place of detention.

3. Critical or intensive care patient rooms within suites of health care facilities.

4. Doors within or serving a single dwelling unit in Groups R-2 and R-3.

5. In other than Group H occupancies, revolving doors complying with Section 1010.3.1 (*Revolving doors*).

6. In other than Group H-1, H-2, H-3, and H-4 occupancies, special purpose horizontal sliding, accordion or folding door assemblies complying with Section 1010.3.3.

7. Power-operated doors in accordance with Section 1010.3.2 (*Power-operated doors*).

8. Doors serving a bathroom within an individual sleeping unit in Group R-1.

9. In other than Group H occupancies, manually operated horizontal sliding doors are permitted in a means of egress from spaces with an occupant load of 10 or less.

1010.2.7 Stairway Doors. Interior stairway means of egress doors shall be openable from both sides without the use of a key or special knowledge or effort.

Exceptions:

1. Stairway discharge doors shall be openable from the egress side and shall only be locked from the opposite side.

2. This section shall not apply to doors arranged in accordance with Section 403.5.3 (*Stairway door operation*).

3. In stairways serving two stories or greater in a building not classified as a high-rise by Section 403 (*High-Rise Buildings*), doors are permitted to be locked from the side opposite the egress side, provided they are openable from the egress side. The exit doors shall be capable of being unlocked simultaneously without unlatching upon a signal from and approved fire department key switch. The key switch shall be located at the exterior opening of the stair or at the main entrance to the building.

4. Stairway exit doors shall be openable from the egress side and shall only be locked from the opposite side in Group B, F, M and S occupancies where the only interior access to the tenant space is from a single exit stairway where permitted in Section 1006.3.4 (*Single exits*).

5. Stairway exit doors shall be openable from the egress side and shall only be locked from the opposite side in Group R-2 occupancies where the only interior access to the dwelling unit is from a single exit stairway where permitted in Section 1006.3.4 (*Single exits*).

1010.3.3 Special Purpose Horizontal Sliding, Accordion or Folding Doors. In other than Group H-1, H-2, H3 and H-4 occupancies, special purpose horizontal sliding, accordion or folding door assemblies permitted to be a component of a means of egress in accordance with Exception 6 to Section 1010.1.2 (*Door swing*) shall comply with all of the following criteria:

1. The doors shall be power operated and shall be capable of being operated manually in the event of power failure.

2. The doors shall be openable by a simple method without special knowledge or effort from the egress side or sides.

3. The force required to operate the door shall not exceed 30 pounds (133 N) to set the door in motion and 15 pounds (67 N) to close or open the door to the minimum required width.

4. The door shall be openable with a force not to exceed 15 pounds (67 N) when a force of 250 pounds (1100 N) is applied perpendicular to the door adjacent to the operating device.

5. The door assembly shall comply with the applicable fire protection rating and, where rated, shall be self-closing or automatic closing by smoke detection in

accordance with Section 716.2.6.6 (*Smoke-activated doors*), shall be installed in accordance with NFPA 80 and shall comply with Section 716 (*Door closing*).

6. The door assembly shall have an integrated standby power supply.

7. The door assembly power supply shall be electrically supervised.

8. The door shall open to the minimum required width within 10 seconds after activation of the operating device.

1025.6 Active Egress Path Illumination System. An active egress path illumination system shall be in accordance with Sections 1025.6.1 (*Luminaires*) through 1025.6.6.3 (*Instrumentation and Annunciation*). Designs complying with this section are equivalent to the requirements in Sections 1025.1 (*General*) through 1025.5 (*Illumination*).

The level of the egress illumination shall be in accordance with Section 1008 (*Means of Egress Illumination*).

1025.6.1 Luminaires. Luminaires shall be listed for emergency illumination and contain a lamp with an integral battery, battery charger and manual test switch and comply with Article 700 of the Electrical Code. The unit equipment shall be housed in a rated fixture for indoor wet locations. Luminaire batteries shall be listed for use as a secondary power supply in accordance with UL 924. Luminaires shall not be equipped with an occupancy sensor. Every luminaire shall have a test switch to confirm the lamp's availability for service when operating on primary or emergency power.

Exception: The integral battery and battery charger is not required when luminaires are connected to a Stored Energy Emergency Power Supply System (SEPSS) complying with Section 1025.6.5 (*Stored Energy Emergency Power Supply System*).

1025.6.2 Primary and Secondary Electrical Power. A primary and secondary power source shall be provided for each luminaire. Primary power shall be a dedicated electrical branch circuit supplied from utility power. Secondary power shall be a branch circuit connected to an Emergency Power system complying with the International Fire Code Section 1203.2.15 (*Means of Egress illumination*). The primary and emergency source for each luminaire shall be connected to a dedicated primary and emergency power branch circuit.

1025.6.3 Location. Luminaires for the active egress path illumination system shall be located at each intermediate landing and stair landing within each interior exit stairway.

1025.6.4 Functional Test and Records. The luminaires shall be tested in accordance with Fire Code Section 1032.10 (*Emergency Lighting Equipment Inspection and Testing*)

except that the frequency of activation tests shall be weekly. Documentation records for the location of each luminaire and the results of the weekly activation and annual power tests shall be in accordance with Fire Code Section 1032.10 (*Emergency Lighting Equipment Inspection and Testing*). Records shall be available to the fire code official upon request. Operational testing and maintenance reports produced by the SEPSS are permitted provided they comply with NFPA 110 Chapter 8.

1025.6.5 Lamp Failure. Luminaire lamps that do not operate because of a test or an incident shall be replaced. Any battery that cannot operate a lamp for a minimum of 90 minutes shall be replaced.

1025.6.6 Stored Energy Emergency Power Supply System (SEPSS). When provided, the SEPSS with an integral alternating current – to – direct current inverter shall comply with International Fire Code Section 1203.1.3 (*Installation*) and be listed in accordance with UL 924. The SEPSS shall be designed as Level 1 system in accordance with NFPA 111.

The SEPSS shall be located in a room separated from the remainder of the building by a minimum 1-hour fire-resistance rated construction and required opening protectives in accordance with this code. The design temperature and humidity of the room housing the SEPPS shall be in accordance the manufacture installation instructions.

SEPSS is prohibited inside a Fire Command Center.

> 1025.6.6.1 Load Carrying Capacity. Battery systems complying with NFPA 111 shall be used to supply the emergency power to luminaires serving the active egress path illumination system. Batteries shall be rated for a minimum 90-minute discharge time and sized based on the total combined load of luminaires connected to the SEPSS.
>
> 1025.6.6.2 Required SEPSS. In buildings where the highest occupied floor is less than or equal to 120 feet above the lowest level of fire department access, one SEPSS shall be provided that complies with Section 1025.6.6 (*Stored Energy Emergency Power Supply System*) for all required interior exit stairways. A SEPSS shall be provided for each required interior exit stairway that serves floors greater than 120 feet above the lowest level of fire department access.
>
> 1025.6.6.3 Instrumentation and Annunciation. Instrumentation and annunciation shall be in accordance with NFPA 111. A remote annunciator displaying the status of the SEPSS shall be provided in the Fire Command Center. The SEPSS and its annunciator shall display the following information and its function shall be identified in the Fire Command Center:

1. Electrical load on utility power;

2. Electrical load on emergency power;

3. Output circuit breaker open;

4. Output overload or overcurrent;

5. High temperature;

6. Emergency conversion equipment is bypassed;

7. Low battery capacity; and

8. Any major or minor alarms prescribed by the SEPSS manufacturer.

1101.2 Design. Buildings and facilities shall be designed and constructed to be accessible in accordance with this code and ICC A117.1.

Exception: Components of projects designed in accordance with and regulated by the Architectural Barriers Division of the Texas Department of Licensing and Regulation shall be deemed to be in compliance with the requirements of this chapter, provided the scope of accessible features complies with the building code.

1108.6.1.2 Type B Units. In structures with three or more dwelling units or sleeping units intended to be occupied as a residence, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

Exception: The number of Type B units is permitted to be reduced in accordance with Section 1108.7 (*General exceptions*).

1108.6.2.2.2 Type B Units. Where there are three or more dwelling units or sleeping units intended to be occupied as a residence in a single structure, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

Exception: The number of Type B units is permitted to be reduced in accordance with Section 1108.7 (*General exceptions*).

1108.6.2.3.2 Type B Units. Where there are three or more dwelling units or sleeping units intended to be occupied as a residence in a single structure, every dwelling unit and every sleeping unit intended to be occupied as a residence shall be a Type B unit.

Exception: The number of Type B units is permitted to be reduced in accordance with Section 1108.7 (*General exceptions*).

1108.6.3 Group R-3. In Group R-3 occupancies where there are three or more dwelling units or sleeping units intended to be occupied as a residence in a single structure, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit. Bedrooms within congregate living facilities shall be counted as sleeping units for the purpose of determining the number of units.

> Exception: The number of Type B units is permitted to be reduced in accordance with Section 1108.7 (*General exceptions*).

1108.6.4.2 Type B Units. In structures with three or more dwelling units or sleeping units intended to be occupied as a residence, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

> Exception: The number of Type B units is permitted to be reduced in accordance with Section 1108.7 (*General exceptions*).

1301.1 Energy Efficiency. Buildings shall be designed and constructed in accordance with the Energy Code.

1607.8.2 Fire Truck and Emergency Vehicles. Where a structure or portions of a structure are accessed and loaded by fire department access vehicles and other similar emergency vehicles, the structure shall be designed as specified in the Fire Code Section 503.2.6 (*Bridges and elevated surfaces*).

**Section 1612 FLOOD LOADS.**

1612.1 General. A building or structure in a flood hazard area shall be designed and constructed according to Article 3 (*Flood Hazard Areas*).

1612.2 Design and Construction. A building or structure in a flood hazard area shall be designed in accordance with Article 3 (*Flood Hazard Areas*).

1612.3 Establishment of Flood Hazard Areas. Flood hazard areas are established in Article 3 (*Flood Hazard Areas*).

1612.4 Flood Hazard Documentation. Article 3 (*Flood Hazard Areas*) describes the documentation necessary for a building or structure located in a flood hazard area.

**Section 1811 EARTH RETENTION SYSTEMS**

1811.1 Tieback Anchors and Soil and Rock Nails. Tieback anchors and soil and rock nails that are allowed in the public right-of-way as components of earth retention systems as provided in Section 3202.1.4 (*Earth retention system components*) shall comply with Sections 1811.1.1 (*Depth of tiebacks anchors and soil and rock nails*) through 1811.1.3 (*Length of tiebacks anchors and soil and rock nails*).

1811.1.1 Depth of Tieback Anchors and Soil and Rock Nails. At the right-of-way line, tieback anchors and soil and rock anchors shall be at least 6 feet (1,829 mm) below the elevation of the adjacent street curb.

1811.1.2 Separation Distance from Buried Utilities. Tieback anchors and soil and rock nails shall be below and at least five feet (1,524 mm) away from the nearest outside surface of any existing or planned buried utility in the public right-of-way.

1811.1.3 Length of Tieback Anchors and Soil and Rock Nails. Tieback anchors and soil and rock nails that extend beyond the center of the public right-of-way are prohibited.

2108.4 ACI 530/ASCE 5/TMS402

Section 3.1.7.2.2. In Plane Bending. For masonry subjected to in-plane loads, the modulus of rupture, $f_r$, normal and parallel to the bed joints shall be taken from Table 3.1.7.2.1. For grouted stack bond masonry, tension parallel to the bed joints shall be assumed to be resisted only by the continuous horizontal grout section.

2901.1 Scope. The provisions of this chapter and the Plumbing Code shall govern the design, construction, erection and installation of plumbing components, appliances, equipment and systems used in buildings and structures covered by this code.

Table 2902.1, Column Header 4. Reference to Section 424.2 of the International Plumbing Code shall be replaced with the following: In each bathroom or toilet room, urinals shall not be substituted for more than 67 percent of the required water closets in assembly and educational occupancies. Urinals shall not be substituted for more than 50 percent of the required water closets in all other occupancies.

Table 2902.1, Column Header 7. Reference to Section 410 of the International Plumbing Code shall be replaced with Section 415 of the Plumbing Code.

2902.2 Separate Facilities. Where plumbing fixtures are required, separate facilities shall be provided for each sex.

Exceptions:

1. Separate facilities shall not be required for dwelling units and sleeping units.
2. Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 15 or fewer.
3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 100 or fewer.

4. Separate facilities shall not be required in business occupancies when the maximum occupant load is 50 or fewer.

5. Separate facilities shall not be required to be designated by sex where single-user toilets rooms are provided in accordance with Section 2902.1.2.

6. Separate facilities shall not be required where rooms having both water closets and lavatory fixtures are designed for use by both sexes and privacy for water closets are installed in accordance with Section 405.3.4 of the International Plumbing Code. Urinals shall be located in an area visually separated from the remainder of the facility or each urinal that is provided shall be located in a stall.

2902.6 Small Occupancies. Drinking fountains shall not be required for an occupant load of 30 or fewer. For a business or a mercantile occupancy where the occupancy load is 30 or fewer, service sinks shall not be required.

3103.5 Portable Classrooms. Portable classroom buildings may be moved into or within this jurisdiction or within a public school district without conforming to the adopted Energy Code.

3201.1 Encroachments Scope. The provisions of this chapter shall govern the encroachment of structures into the public right-of-way, including components of earth retention systems used to facilitate below-grade construction of a building or structure.

3202.1 Encroachments Below Grade. Encroachments below grade shall comply with Sections 3202.1.1 (*Structural support*) through 3202.1.4 (*Earth retention system components*).

3202.1.4 Earth Retention System Components. Components of earth retention systems that are required for structural support of a building or structure are prohibited in the public right-of-way. Components of earth retention systems that are needed only during construction of the below-grade portion of a building or structure are subject to the following conditions:

1. Approval of the Director of the Public Works Department is required before construction of earth retention system components in public right-of-way commences.

2. All components of an earth retention system are prohibited in the public right-of-way except for (1) tieback anchors that are part of a soldier pile and lagging system; (2) tieback anchors that are part of a diaphragm or slurry wall system; (3) tieback anchors that are part of a sheet pile wall system; (4) tieback anchors that

are part of a secant wall system; and (5) soil or rock nails that are part of a nail wall.

3. Tieback anchors or soil or rock nails that are necessary as functional components of the earth retention system for longer than 12 months are prohibited in the public right-of-way.

4. Tieback anchors and soil and rock nails allowed in the public right-of-way shall be designed according to the criteria in Section 1811 (*Earth Retention Systems*).

3202.3.4 Pedestrian Walkways. An approved encroachment agreement that complies with Chapter 14-11 (*Use of Right of Way*) is required prior to the installation of a pedestrian walkway and all associated utilities over a public right-of-way. The vertical clearance from the public right-of-way to the lowest part of a pedestrian walkway shall be not less than 16 feet 6 inches over roadway and alley subject to truck traffic, and not less than 15 feet over other areas in the right-of-way.

**PART 2.** City Code Chapter 25-12 (*Technical Codes*) is amended to repeal and replace Article 10 (*Existing Building Code*) to read:

***ARTICLE 10. EXISTING BUILDING CODE.***

**§ 25-12-231 INTERNATIONAL EXISTING BUILDING CODE.**

(A) The International Existing Building Code, 2021 Edition, published by the International Code Council ("2021 International Existing Building Code") is adopted and incorporated by reference into this section with the deletions in Subsection (B) and the amendments in Section 25-12-233 (*Local Amendments to the International Existing Building Code*).

(B) The following provisions of the 2021 International Existing Building Code are deleted.

| | | | | | |
|---|---|---|---|---|---|
| 103 plus subsections | 105.1.1 | 105.5 | 106.2.6 | 111.3 | 112 |

(C) The city clerk shall file a copy of the 2021 International Existing Building Code with the official ordinances of the City.

**§ 25-12-232 CITATIONS TO THE EXISTING BUILDING CODE.**

In the City Code, "Existing Building Code" means the 2021 International Existing Building Code adopted in Section 25-12-231 (*International Existing Building Code*) as

amended by Section 25-12-233 (*Local Amendments to the International Existing Building Code*). In this article, "this code" means the Existing Building Code.

**§ 25-12-233 LOCAL AMENDMENTS TO THE INTERNATIONAL EXISTING BUILDING CODE.**

Each provision in this section is a substitute for the identically numbered provision deleted in Section 25-12-231 (B) (*International Existing Building Code*) or is an addition to the 2021 International Existing Building Code.

**SECTION 103 BUILDING OFFICIAL.**

[A] 103.1 Authority. The building official administers, enforces, and interprets this code. The building official may designate one or more deputy building officials.

105.1.1 Annual permit. Instead of an individual permit for each alteration to an already approved electrical, gas, mechanical or plumbing installation, and minor building alterations and repairs, the building official is authorized to issue an annual permit upon application therefor to any person, firm or corporation regularly employing one or more qualified trade persons in the building, structure or on the premises owned or operated by the applicant for the permit. The facility shall maintain records on all work performed under the annual permit in accordance with Section 105.1.2 (*Annual Permit Records*).

105.1.1.1 Authorized Scope of Work. See Building Criteria Manual, Section 1.1.2 (*Building Inspection Processes*) for authorized work under the annual permit.

105.5 Time Limits. Article 13 (*Administration of Technical Codes*) of this chapter establishes permit application time limits and requirements applicable to permit expiration and reactivation, including a review fee for expired permits.

106.2.6 Site plan. The construction documents submitted with the application for permit shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, distances from lot lines, the established street grades and the proposed finished grades and, as applicable, flood hazard areas, floodways, and design flood elevations: and it shall be drawn in accordance with an accurate boundary line survey. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. For a building or structure involving below-grade construction, the site plan shall show the location of proposed earth retention system components allowed under Section 3202.1.4 (*Earth Retention System Components*) of the Building Code. The building official is authorized to waive or modify the requirement of the site plan when the application for permit is for alteration, repair or change of occupancy when otherwise warranted.

111.3 Authority to Disconnect Service Utilities. The building official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property, where one or more circumstances listed in Section 15-9-101(A)(2) (*Basis for Termination of Service*) exist, or where such utility connection has been made without the approval required by Section 112.1 or 112.2. The building official shall provide notice in accordance with Section 15-9-106 (*Notice of Service Disconnection*) of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner or the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter in accordance with Section 15-9-106 (*Notice of Service Disconnection*).

**Section 112 BUILDING AND FIRE CODE BOARD OF APPEALS.** The Building and Fire Code Board of Appeals shall comply with Chapter 2-1 (*Boards and Commissions*).

**PART 3**. City Code Chapter 25-12 (*Technical Codes*) is amended to repeal and replace Article 13 (*Administration of Technical Codes*) to read as follows:

***ARTICLE 13. ADMINISTRATION OF TECHNICAL CODES.***

**§ 25-12-266 APPLICATION AND APPROVAL.**

City Code Chapter 25-1, Article 4 (*Application and Approval*) establishes general provisions and requirements for filing and review of a permit application. Unless a permit is issued, an application for any proposed work expires one year after the date the application is filed. See the Building Criteria Manual for additional rules.

**§ 25-12-267 EXPIRATION.**

Except as provided in Section 25-12-268 (*Extension*) and Section 25-12-269 (*Reactivation*), a permit issued per the requirements of Chapter 25-11 (*Building, Demolition, and Relocation Permits; Special Requirements for Historic Structures*) and Chapter 25-12 (*Technical Codes*) expires on the 181st day:

1. after the date that the permit is issued, if the project has received no inspections as required under this chapter; or

2. after the date of the last scheduled inspection if that inspection is scheduled before the 181st day and once performed, shows progress towards completion of the project.

Exception: An annual permit issued under Section 105.1.1 of the Building Code is only valid for a period of 360 days from the date of issuance and does not qualify for extension or reactivation.

**§ 25-12-268 EXTENSION.**

Upon written request submitted prior to the expiration date, the building official may grant a one-time extension for a period not to exceed 180 days. Except as provided in Section 25-12-269 (*Reactivation*), a permit issued per the requirements of this chapter expires on the 181st day after the extension is granted if the project has received no inspections required by this chapter.

**§ 25-12-269 REACTIVATION.**

(A) Except as provided in Subsection (C), the building official may reactivate a permit issued pursuant Chapter 25-11 (*Building, Demolition, and Relocation Permits; Special Requirements for Historic Structures*) and Chapter 25-12 (*Technical Codes*) for a project that has received no inspections for a period of more than 180 days.

(B) A permit holder shall submit an application to reactivate a permit on a form provided by the building official and pay a reactivation fee established by separate ordinance.

(C) The building official may not reactivate a permit if the permit:

(1) was reactivated at least once; and

(2) does not comply with the City Code in effect at the time a permit holder requests a reactivation.

(D) The building official may adopt an administrative rule that establishes additional criteria for reactivating a permit.

(E) A permit that is reactivated in accordance with this section expires on the 181st day after the date that the permit is reactivated if the project has received no inspections as required by Chapter 25-11 (*Building, Demolition, and Relocation Permits; Special Requirements for Historic Structures*) and Chapter 25-12 (*Technical Codes*).

**§ 25-12-270 REVIEW FEE FOR EXPIRED PERMITS.**

An applicant for a permit under this chapter shall pay an expired permit review fee, established by separate ordinance, if the applicant has obtained one or more expired permits that have not been either reactivated in accordance with the requirements of

Section 25-12-269 (*Reactivation*) or withdrawn by the property owner, in writing, on a form provided by the building official

**§ 25-12-271 NOTICE OF APPEAL OR CASE BEFORE BOARD OR COMMISSION UNDER THIS CHAPTER.**

Notice of a hearing on an appeal or case before a board or commission created by, or having jurisdiction over, regulations contained in, or enforcement authorized under this chapter, shall be given by mailing notice before the tenth day before the date of the hearing to:

(1) the applicant;

(2) the notice owner of the subject property, if any;

(3) all parties to the appeal, including interested parties; and

(4) for an appeal or case before the Building and Standards Commission, to the record owner, and all lienholders of record on the subject property.

**§ 25-12-272 RECOMMENDATION.**

The Building and Fire Code Board of Appeals is the board authorized to make recommendations for changes to this article.

**PART 4**. City Code Chapter 25-12 (*Technical Codes*) is amended to add a new Article 3 (*Flood Hazard Areas*) to read as follows:

***ARTICLE 3. FLOOD HAZARD AREAS***

**§ 25-12-51 APPLICABILITY.**

(A) This article applies to the design, construction of buildings and structures, and additions and alterations to buildings and structures located in flood hazard areas.

(B) This article is administered, implemented, and enforced in conjunction with each article of Chapter 25-12 (*Technical Codes*).

(C) This article is amended in the same manner as the Building and Residential Codes.

**§ 25-12-52 DEFINITIONS.**

(A) Except as otherwise provided, the definitions in this subsection apply to all articles in this chapter:

(1) BASE FLOOD A flood that has the following characteristics:

(a) For areas amended to incorporate Atlas 14 data, a flood that has a one percent chance of being equaled or exceeded in any given year (100-year flood) calculated under fully developed conditions as prescribed by the Drainage Criteria Manual as amended to incorporate Atlas 14 data;

(b) For areas not yet amended to incorporate Atlas 14 data, a flood that has a 0.2 percent chance of being equaled or exceeded in any given year (500-year flood) calculated under the conditions underlying the FEMA Flood Insurance Rate Map as of January 6, 2016, as subsequently revised, or as calculated under existing conditions as prescribed by the Drainage Criteria Manual using data predating Atlas 14; or

(c) For the Colorado River, a flood that has a one percent chance of being equaled or exceeded in any given year (100-year flood) calculated under the conditions underlying the FEMA Flood Insurance Rate Map dated January 6, 2016, or as subsequently revised.

(2) BASE FLOOD ELEVATION The elevation of the base flood, including wave height, relative to the National Geodetic Vertical Datum (NGVD), North American Vertical Datum (NAVD) or other datum specified on the Flood Insurance Rate Map (FIRM).

(3) DESIGN FLOOD A flood that has the following characteristics:

(a) For areas amended to incorporate Atlas 14 data, a flood associated with an area of a floodplain subject to a one percent or greater chance of being flooded in any year (100-year flood) based on projected full development in accordance with the City of Austin Drainage Criteria Manual as amended to incorporate Atlas 14 data;

(b) For areas not yet amended to incorporate Atlas 14 data, a flood associated with an area of a floodplain subject to a 0.2 percent or greater chance of being flooded in any year (500-year flood) calculated under the conditions underlying the FEMA Flood Insurance Rate Map as of January 6, 2016, as subsequently revised, or as calculated under existing conditions as prescribed by the Drainage Criteria Manual using data predating Atlas 14; or

(c) For the Colorado River, a flood associated with an area of a floodplain subject to a one percent or greater chance of being flooded in any year (100-year flood) as depicted on the FEMA Flood Insurance Rate Map dated January 6, 2016, or as subsequently revised.

(4) DESIGN FLOOD ELEVATION The elevation of the "design flood" relative to the City of Austin vertical datum standard.

(5) DEVELOPMENT Any man-made change to improved or unimproved real estate, including but not limited to, buildings or other structures, temporary or permanent storage of materials, mining, dredging, filling, grading, paving, excavations, operations and other land disturbing activities.

(6) FLOOD or FLOODING A general and temporary condition of partial or complete inundation of normally dry land from:

(a) the overflow of inland waters; or

(b) the unusual and rapid accumulation or runoff of surface waters from any source.

(7) FLOOD DAMAGE-RESISTANT MATERIALS Any construction material capable of withstanding direct and prolonged contact with floodwaters without sustaining any damage that requires more than cosmetic repair.

(8) FLOOD HAZARD AREA An area that has the following characteristics:

(a) For areas amended to incorporate Atlas 14 data, an area within a floodplain subject to a one percent or greater chance of being flooded in any year (100-year flood) based on projected full development in accordance with the City of Austin Drainage Criteria Manual as amended to incorporate Atlas 14 data;

(b) For areas not yet amended to incorporate Atlas 14 data, an area of a floodplain subject to a 0.2 percent or greater chance of being flooded in any year (500-year flood) calculated under the conditions underlying the FEMA Flood Insurance Rate Map as of January 6, 2016, as subsequently revised, or as calculated under existing conditions as prescribed by the Drainage Criteria Manual using data predating Atlas 14; or

(c) For the Colorado River, an area within a floodplain subject to a one percent or greater chance of being flooded in any year (100-year flood) as depicted on the FEMA Flood Insurance Rate Map dated January 6, 2016, or as subsequently revised.

(9) FLOOD INSURANCE RATE MAP (FIRM) An official map of a community on which the Federal Emergency Management Agency (FEMA)

has delineated both the special flood hazard areas and the risk premium zones applicable to the community.

(10) FLOOD INSURANCE STUDY The official report provided by the Federal Emergency Management Agency containing the Flood Insurance Rate Map (FIRM), the Flood Boundary Map, the water surface elevation of the base flood, and supporting technical data.

(11) FLOODWAY The channel of the river, creek, or other watercourse and the adjacent land areas that shall be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. An area that has the following characteristics:

(a) For the Colorado River, an area with a floodplain subject to a four percent or greater chance of flooding in any year (25-year flood) based on existing developed conditions as prescribed by the Drainage Criteria Manual using data predating Atlas 14; or

(b) For all other rivers, creeks, and watercourses in areas amended to incorporate Atlas 14 data, an area with a four percent or greater chance of flooding in any year (25-year flood) based on a projected full development in accordance with the City of Austin Drainage Criteria Manual as amended to incorporate Atlas 14 data; or

(c) For all other rivers, creeks, and watercourses in areas not yet amended to incorporate Atlas 14 data, an area with a one percent or greater chance of flooding in any year (100-year flood) based on a projected full development in accordance with the City of Austin Drainage Criteria Manual using data predating Atlas 14.

(12) FUNCTIONALLY DEPENDENT FACILITY A facility which cannot be used for its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading or unloading of cargo or passengers, shipbuilding or ship repair. The term does not include long-term storage, manufacture, sales or service facilities.

(13) MANUFACTURED HOME A structure that is transportable in one or more sections, built on a permanent chassis, designed for use with or without a permanent foundation when attached to the required utilities, and constructed to the Federal Mobile Home Construction and Safety Standards and rules and regulations promulgated by the U.S. Department of Housing and Urban Development. The term also includes mobile homes, park trailers,

travel trailers and similar transportable structures that are placed on a site for 180 consecutive days or longer.

(14) MANUFACTURED HOME PARK OR SUBDIVISION A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

(15) RECREATIONAL VEHICLE A vehicle that is built on a single chassis, 400 square feet (37.16 m2) or less when measured at the largest horizontal projection, designed to be self-propelled or permanently towable by a light-duty truck, and designed primarily not for use as a permanent dwelling but, as temporary living quarters for recreational, camping, travel or seasonal use. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect-type utilities and security devices and has no permanently attached additions.

(16) REGULATORY FLOOD DATUM An established plane of reference from which elevations and depth of flooding may be determined for specific locations of the floodplain. It is the water level of the design flood plus a freeboard factor of one foot. Design flood plus freeboard equals Regulatory Flood Datum.

(17) SPECIAL FLOOD HAZARD AREA The land area subject to flood hazards and shown on a Flood Insurance Rate Map or other flood hazard map as Zone A, AE, A1-30, A99, AR, AO, AH, V, VO, VE or VI-30.

(18) START OF CONSTRUCTION The date a permit is issued for new construction or substantial improvements to existing structures if construction, repair, reconstruction, rehabilitation, addition, placement or other improvement starts within 180 days from the date the permit is issued. Construction starts when permanent construction of a building (including a manufactured home) is first placed and includes pouring a slab or footing, installing pilings, or constructing columns. Permanent construction does not include preparing land (clearing, excavating, grading, or filing); installing streets or walkways; excavating for a basement, footing, pier, or foundation; or erecting temporary forms or installing accessory buildings not occupied as dwelling units or not part of the main building. For a substantial improvement, construction starts when a wall, ceiling, floor, or other structural part of a building is altered even if the alteration does not affect the external dimensions of the building.

(19) SUBSTANTIAL DAMAGE Damage of any origin sustained by a structure, whereby the cost of restoring the structure to its before-damage condition

would equal or exceed 50 percent of the market value of the structure before the damage occurred.

(20) SUBSTANTIAL IMPROVEMENT For the purpose of determining compliance with the flood hazard management provisions of the Building Code, a substantial improvement is any combination of repair, reconstruction, rehabilitation, alteration, addition or other improvement of a building or structure during the immediate 10-year period, the cost of which cumulatively equals or exceeds 50 percent of the market value of the structure before the improvement or repair is started, or if the structure has been damaged and is being restored, before the damage occurred. If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include either of the following:

1. Any project for improvement of a building required to correct existing health, sanitary or safety code violations identified by the building official and that are the minimum necessary to assure safe living conditions.

2. Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure; for the purpose of this exclusion, a historic building is a building that is:

    a. listed or preliminarily determined to be eligible for listing in the National Register of Historic Places; or

    b. determined by the Secretary of the U.S. Department of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined to qualify as a historic district; or

    c. designated as historic under a State of Texas or local historic preservation program that is approved by the Department of the Interior.

(22) VARIANCE A grant of relief from the requirements of this article which permits construction in a manner otherwise prohibited by this article where specific enforcement would result in unnecessary hardship.

(B) A term defined in an article in this chapter has the same meaning in this article.

## § 25-12-53 FLOOD LOADS.

(A) General

(1) Within flood hazard areas as established in Subsection (B) (*Establishment of flood hazard areas*), all new construction and alterations of buildings, structures and portions of buildings and structures, including substantial improvement and restoration of substantial damage to buildings and structures, shall be designed and constructed to resist the effects of flood hazards and flood loads. When new construction constitutes a substantial improvement or restoration of substantial damage all aspects of the existing structure shall be brought into compliance with the requirements for new construction for flood design. All elevation requirements noted in this ordinance shall be documented using the Elevation Certificate, FEMA 086-0-33, and shall be certified by a registered professional engineer, surveyor, or architect, and shall be submitted to the Floodplain Administrator.

(2) Except as otherwise provided, this section applies to residential and non-residential building and structures.

(B) Establishment of flood hazard areas. The City establishes a flood hazard area that includes the following:

(1) areas of special flood hazard areas identified by the Federal Emergency Management Agency in the current scientific and engineering report entitled, "The Flood Insurance Study (FIS) for Williamson County, Texas and Incorporated Areas" dated December 20, 2019, with accompanying Flood Insurance Rate Maps (FIRM) dated December 20, 2019, the current scientific and engineering report entitled "The Flood Insurance Study for Travis County, Texas and Incorporated Areas" dated January 6, 2016, with accompanying Flood Insurance Rate Maps dated January 6, 2016, and any revisions are adopted by reference and declared to be a part of this section; and

(2) the 100-year and 25-year floodplains as defined in the Austin City Code are adopted by reference and declared to be part of this section.

(C) Design and construction. The design and construction of buildings and structures, and additions and alterations to buildings and structures located in flood hazard areas, shall be in accordance with ASCE 24, Flood Resistant Design and Construction.

(1) Elevation Requirements.

(a) Unless otherwise specified in Title 25 (*Land Development*), the lowest floor of a building or structure shall be elevated a minimum of two feet above the design flood elevation.

(b) Freeboard. Unless otherwise specified in the Title 25 (*Land Development*), a minimum freeboard of two foot shall be added where the design flood elevation or other elevation requirements are specified.

(c) In areas of shallow flooding (AO Zones), the lowest floor (including a basement) of a building or structure shall be elevated higher than the highest adjacent grade as the depth number specified in feet (mm) on the FIRM plus two feet, or at least three feet (915 mm) if a depth number is not specified.

(d) A basement floor that is below grade on all sides shall be elevated at least two feet above the design flood elevation.

Exception. An enclosed area, including a basement, which is below the design flood elevation but not below grade on all sides shall meet the requirements in Subsection (C)(2) (*Enclosed area below design flood elevation*).

(2) Enclosed area below design flood elevation. An enclosed area, including a crawl space, that is below the regulatory flood datum shall:

(a) be used only for parking vehicles, building access or storage excluding property, material, or equipment that may constitute a safety hazard when contacted by flood waters;

(b) include flood openings that meet the following criteria:

(i) the enclosed area shall have a minimum of two openings located on different sides of the enclosed area; if a building includes more than one enclosed area below the design flood elevation, each area shall have openings on exterior walls;

(ii) the total net area of all openings shall be at least 1 square inch (645 mm2) per square foot (0.093 m2) of the enclosed area, or the openings are designed and the construction documents state that the design and installation will provide for the equalization of hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwaters;

(iii) the bottom of each opening is 1 foot (305 mm) or less above adjacent ground level;

(iv) each opening is at least 3 inches (76 mm) in diameter;

(v) any louvers, screens or other opening covers allow the automatic flow of floodwaters into and out of the enclosed areas;

(vi) a door or window that does not meet the requirements in Subsection (C)(2)(b)(i) through (v) does not comply with this section; and

(vii) constructed of flood damage-resistant materials.

(3) Provisions of safe refuge.

(a) A building or structure constructed in the flood hazard area where the ground surface is below the design flood elevation or where flood water velocities at the building may exceed five feet per second shall provide an enclosed refuge space two feet or more above the design flood elevation of sufficient area to provide for the occupancy load with a minimum of 12 square feet per person. The refuge space shall be provided to an exterior platform and stairway not less than three feet wide.

(b) An existing building or structure in a flood hazard area that is substantially improved or where a change of use or occupancy is made, shall conform to the requirements of Subsection (a).

(c) Regardless of the structure or space classification, a floor level or portion of a building or structure that is lower than two feet above the design flood elevation shall not be used residentially, or for storage of any property, materials, or equipment that might constitute a safety hazard when contacted by flood waters.

(4) Means of egress.

(a) Unless otherwise approved by the building official, normal access to the building shall be by direct connection with an area that is a minimum of one foot above the design flood elevation.

(b) For a building that is part of a single-family condo regime residential building permit application and part of a site plan that was approved

between December 1, 2017, and November 25, 2019, compliance with this section shall be determined at the time of site plan approval.

(c) For a building that is part of a single-family building permit application and part of (a) a preliminary plan that was submitted for approval between December 1, 2014, and November 25, 2019, or (b) a final plat that was approved between December 1, 2017, and November 25, 2019, compliance with this section shall be determined at the time of preliminary plan or final plat approval, respectively.

(d) For all other buildings subject to Article 11 (*Residential Code*), compliance with this section shall be determined at the time of building permit application.

Exception. This subsection does not apply to an addition or alteration to an existing building or structure subject to Article 11 (*Residential Code*) that is not a substantial improvement as defined in Section 25-12-52 (*Definitions*).

(5) Installation of openings. The walls of enclosed areas shall have openings installed such that:

(a) There shall be not less than two openings on different sides of each enclosed area; if a building has more than one enclosed area, each area shall have openings.

(b) The bottom of each opening shall be not more than 1 foot (305 mm) above the higher of the final interior grade or floor and the finished exterior grade immediately under each opening.

(c) Openings shall be permitted to be installed in doors and windows; doors and windows without installed openings do not meet the requirements of this section.

(D) Flood hazard documentation. For construction in flood hazard areas, the following documentation shall be prepared and sealed by a registered design professional and submitted to the building official:

(1) The elevation of the lowest floor, including the basement, as required by the lowest floor elevation inspection in Building Code Section 110.3.3 (*Lowest floor elevation*) and for the final inspection in Building Code Section 110.3.10.1 (*Flood hazard documentation*).

(2) For fully enclosed areas below the design flood elevation where provisions to allow for the automatic entry and exit of floodwaters do not meet the minimum requirements in Section 2.6.2.1 of ASCE 24, construction documents shall include a statement that the design will provide for equalization of hydrostatic flood forces in accordance with Section 2.6.2.2 of ASCE 24.

(3) For dry flood-proofed nonresidential buildings, construction documents shall include a statement that the dry floodproofing is designed in accordance with ASCE 24.

(4) The as-built elevation documentation of the elevations specified in Section 25-12-53(C)(1) (*Elevation Requirements*).

**§ 25-12-54 FLOOD-RESISTANT CONSTRUCTION.**

(A) Statutory Authorization**.** As a home-rule city, the City of Austin has the responsibility and power to adopt regulations designed to minimize flood losses. The Legislature of the State of Texas has in Sections 16.3145 and 16.315 of the Texas Water Code authorized local government units to adopt regulations designed to minimize flood losses.

(B) Administration

(1) Purpose. The purpose of this section is to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific flood hazard areas through the establishment of comprehensive regulations for management of flood hazard areas designed to:

(a) prevent unnecessary disruption of commerce, access and public service during times of flooding;

(b) manage the alteration of natural flood plains, stream channels and shorelines;

(c) manage filling, grading, dredging and other development which may increase flood damage or erosion potential;

(d) prevent or regulate the construction of flood barriers which will divert floodwaters or which can increase flood hazards;

(e) contribute to improved construction techniques in the flood plain;

(f) restrict or prohibit uses that are dangerous to health, safety or property in times of flood, or cause excessive increases in flood heights or velocities; and

(g) require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.

(2) Objectives. The objectives of this section are to protect human life, minimize the expenditure of public money for flood control projects, minimize the need for rescue and relief efforts associated with flooding, minimize prolonged business interruption, minimize damage to public facilities and utilities, help maintain a stable tax base by providing for the sound use and development of flood-prone areas, contribute to improved construction techniques in the flood plain and ensure that potential owners and occupants are notified that property is within flood hazard areas.

(3) Scope. The provisions of this section shall apply to all proposed development in a flood hazard area established in Section 25-12-53 (*Flood Loads*) of this code.

(4) Alternative provisions. As an alternative to the requirements applicable to building and structures subject to Article 11 (*Residential Code*), ASCE 24 is permitted subject to the limitations of this code and the limitations therein.

(5) Structural systems. Structural systems of buildings and structures shall be designed, connected and anchored to resist flotation, collapse or permanent lateral movement due to structural loads and stresses from flooding equal to the design flood elevation.

(6) Flood-resistant construction. Buildings and structures erected in areas prone to flooding shall be constructed by methods and practices that minimize flood damage.

(C) Applicability

(1) General. This section, in conjunction with other applicable provisions in this chapter, provides minimum requirements for development located in flood hazard areas, including:

(a) the subdivision of land;

(b) site improvements and installation of utilities;

(c) placement and replacement of manufactured homes;

(d) placement of recreational vehicles;

(e) new construction and repair, reconstruction, rehabilitation, or additions to new construction;

(f) substantial improvement of existing buildings and structures, including restoration after damage; and

(g) the installation of tanks.

(2) Abrogation and greater restrictions. This section is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this section and another city code provision, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

(3) Establishment of flood hazard areas. Flood hazard areas are established in Section 25-12-53(B) (*Establishment of flood hazard areas*).

(4) Nonconforming Uses. A structure, or the use of a structure or premises, which was lawful before the adoption of the Building Code, but which does not conform with the requirements of these regulations, may be continued subject to the following conditions:

(a) No such use shall be expanded, changed, enlarged, or altered in a way which increases its nonconformity.

(b) No substantial improvement of the structure shall be made unless the structure is changed to conform to these regulations.

(c) If a nonconforming use is discontinued for a period of 90 days, any future use of the building or premises shall conform to these regulations.

(d) Any nonconforming use or structure which is destroyed by any means, including floods, to an extent of 50 percent or more of its market value, shall not be reconstructed except in conformance with the provisions of these regulations.

(D) Powers and Duties

(1) Permit applications. All applications for permits shall comply with the following:

(a) The building official shall review all permit applications to determine whether proposed development is located in flood hazard areas established in Section 25-12-53(B) (*Establishment of flood hazard areas*).

(b) Where a proposed development site is in a flood hazard area, all development to which this section is applicable as specified in Subsection (C)(1) (*General*) shall be designed and constructed with methods, practices and materials that minimize flood damage and that are in accordance with the applicable provisions in Chapter 25-12 (*Technical Code*) and ASCE 24.

(2) Other Permits. It shall be the responsibility of the building official to ensure that approval of a proposed development shall not be given until proof that necessary approvals and/or permits have been granted by federal, state, or local agencies having jurisdiction over such development.

(3) Establishing the design flood elevation. The design flood elevation defines areas prone to flooding and describes, at a minimum, the base flood elevation at the depth of peak elevation of flooding based upon:

(a) For areas amended to incorporate Atlas 14 data, the 100-year floodplain calculated under fully developed conditions in accordance with the City of Austin Drainage Criteria Manual as amended to incorporate Atlas 14 data;

(b) For areas not yet amended to incorporate Atlas 14 data, the 500-year floodplain either as depicted on the FEMA Flood Insurance Rate Map as of January 6, 2016, as subsequently revised, or as calculated under existing conditions as prescribed by the Drainage Criteria Manual using data predating Atlas 14; or

(c) For the Colorado River, the 100-year floodplain as depicted on the FEMA Flood Insurance Rate Map dated January 6, 2016, or as subsequently revised.

(4) Determination of design flood elevations. If design flood elevations are not specified, the building official is authorized to require the applicant to:

(a) Obtain, review and reasonably utilize data available from a federal, state or other source; or

(b) Determine the design flood elevation in accordance with the 100-year floodplain as defined in the Austin City Code. Such analyses shall be

performed and sealed by a Professional Engineer licensed by the State of Texas. Studies, analyses and computations shall be submitted in sufficient detail to allow review and approval by the building official. The accuracy of data submitted for such determination shall be the responsibility of the applicant.

(5) Determination of impacts. In a riverine flood hazard area where design flood elevations are specified but floodways have not been designated, an applicant shall demonstrate that the effect of the proposed building or structure on design flood elevations, including fill, when combined with all other existing and anticipated flood hazard area encroachments, will not increase the design flood elevation at any point within the jurisdiction.

(6) Activities in riverine flood hazard areas. In riverine situations, the building official shall not permit any new construction, substantial improvement or other development, including fill, unless the applicant submits an engineering analysis prepared by a registered design professional, demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the design flood elevation at any point that results in additional adverse flooding on other property.

(7) Lowest floor. The lowest floor shall be the floor of the lowest enclosed area, including basement. The lowest floor does not include any unfinished flood-resistant enclosure that is used only for vehicle parking, building access, or limited storage, unless the enclosure is built to cause the building or structure to violate this section.

Exception. An unfinished enclosure used for storage of property, materials, or equipment that constitute a safety hazard if contacted by flood waters is a lowest floor.

(8) Protection of mechanical, plumbing and electrical systems. Electrical systems, equipment and components; heating, ventilating, air-conditioning; plumbing appliances and plumbing fixtures; duct systems; and other service equipment shall be located at or above the elevation required in Section 25-12-53(C)(1) (*Elevation Requirements*). If replaced as part of a substantial improvement, electrical systems, equipment and components; heating, ventilating, air-conditioning and plumbing appliances and plumbing fixtures; duct systems; and other service equipment shall meet the requirements of this section. Systems, fixtures, and equipment and components shall not be mounted on or penetrate through walls intended to break away under flood loads.

Exception. Locating electrical systems, equipment and components; heating, ventilating, air-conditioning; plumbing appliances and plumbing fixtures; duct systems; and other service equipment is permitted below the elevation required in Section 25-12-53(C)(1) (*Elevation Requirements*) provided that they are designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the required elevation in accordance with ASCE 24. Electrical wiring systems are permitted to be located below the required elevation provided that they conform to the provisions of the electrical part of this code for wet locations.

(9) Protection of water supply and sanitary sewage systems. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the systems in accordance with the plumbing provisions of this code. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into systems and discharges from systems into floodwaters in accordance with the plumbing provisions of this code and Chapter 3 of the International Private Sewage Disposal Code.

(10) Flood-resistant materials. Building materials and installation methods used for flooring and interior and exterior walls and wall coverings below the elevation required in Section 25-12-53(C)(1) (*Elevation Requirements*) shall be flood damage-resistant materials that conform to the provisions of FEMA TB-2.

(11) Floodway encroachment. Prior to issuing a permit for any floodway encroachment, including fill, new construction, substantial improvements and other development or land-disturbing activity, the building official shall require submission of a certification prepared by a Professional Engineer licensed by the State of Texas, along with supporting technical data in accordance with the City of Austin Drainage Criteria Manual, demonstrating that such development will not cause any increase of the level of the design flood.

(12) Floodway revisions. A floodway encroachment that increases the level of the design flood may be considered for a variance only if the applicant has applied for a conditional Flood Insurance Rate Map (FIRM) revision and has received the approval of the Federal Emergency Management Agency (FEMA) provided the conditional Flood Insurance Rate Map (FIRM) revision is required by the City of Austin Drainage Criteria Manual.

(13) Watercourse alteration. Prior to issuing a permit for any alteration or relocation of any watercourse, the building official shall require the applicant to provide notification of the proposal to the appropriate authorities of all affected adjacent government jurisdictions, as well as appropriate state agencies. A copy of the notification shall be maintained in the permit records and submitted to FEMA.

(14) Engineering analysis. The building official shall require submission of an engineering analysis in accordance with the City of Austin Drainage Criteria Manual performed and sealed by a Professional Engineer licensed by the State of Texas demonstrating that the flood-carrying capacity of the altered or relocated portion of the watercourse will not be decreased. Such watercourses shall be maintained in a manner which preserves the channel's flood-carrying capacity.

(15) Records. The building official shall maintain a permanent record of all permits issued in flood hazard areas, including copies of inspection reports and certifications required in Section 25-12-53(D) (*Flood hazard documentation*).

(16) Inspections. Development for which a permit under this section is required shall be subject to inspection. The building official or the building official's designee shall make, or cause to be made, inspections of all development in flood hazard areas authorized by issuance of a permit under this section.

(E) Permits

(1) Required. Any person, owner or owner's authorized agent who intends to conduct any development in a flood hazard area shall first make application to the building official and shall obtain the required permit.

(2) Application for permit. The applicant shall file an application in writing on a form furnished by the building official. Such application shall:

(a) Identify and describe the development to be covered by the permit.

(b) Describe the land on which the proposed development is to be conducted by legal description, street address or similar description that will readily identify and definitely locate the site.

(c) Include a site plan showing the delineation of flood hazard areas, floodway boundaries, flood zones, design flood elevations, ground elevations, proposed lowest floor elevation, proposed fill and excavation and drainage patterns and facilities.

(d) Include in subdivision proposals and other proposed developments with more than 50 lots or larger than 5 acres (20,234 $m^2$), base flood elevation data in accordance with Section 25-12-53(B) (*Establishment of flood hazard areas*).

(e) Indicate the use and occupancy for which the proposed development is intended.

(f) Be accompanied by construction documents, grading and filling plans and other information deemed appropriate by the building official.

(g) State the valuation of the proposed work.

(h) Be signed by the applicant or the applicant's authorized agent.

(3) Validity of permit. The issuance of a permit under this section shall not be construed to be a permit for, or approval of, any violation of this section or any other ordinance of the jurisdiction. The issuance of a permit based on submitted documents and information shall not prevent the building official from requiring the correction of errors. The building official is authorized to prevent occupancy or use of a structure or site which is in violation of this section or other ordinances of the City of Austin.

(4) Time Limitation on Application; Permit Expiration and Reactivation. Article 13 (*Administration of Technical Codes*) of this chapter establishes permit application time limits and requirements applicable to permit expiration and reactivation, including a review fee for expired permits.

Exception: Permits issued under Section 105.1.1 (*Annual permit*) are only valid for a period of 360 days from the date of issuance and cannot be extended.

(5) Suspension or revocation. The building official is authorized to suspend or revoke a permit issued under this section wherever the permit is issued in error or on the basis of incorrect, inaccurate or incomplete information, or in violation of any ordinance or code of the City of Austin.

(F) Variances

(1) General. The City Council shall decide requests for variances from the floodplain regulations in this code and Chapter 25-7 (*Drainage*) after conducting a public hearing. The City Council shall base its determination on technical justifications and has the right to attach such conditions to

variances as it deems necessary to further the purposes and objectives of this article.

(2) Records. The building official shall maintain a permanent record of all variance actions, including justification for their issuance.

(3) Historic structures. A variance may be issued for the repair or rehabilitation of a historic structure upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure, and the variance is the minimum necessary to preserve the historic character and design of the structure.

Exception: Within flood hazard areas, historic structures that are not:

(a) listed or preliminarily determined to be eligible for listing in the National Register of Historic Places; or

(b) determined by the Secretary of the U.S. Department of Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined to qualify as a historic district; or

(c) designated as historic under a state or local historic preservation program that is approved by the Department of Interior.

(4) Functionally dependent facilities. A variance may be issued for the construction or substantial improvement of a functionally dependent facility provided the criteria in Section 25-12-53(A) (*General*) are met and the variance is the minimum necessary to allow the construction or substantial improvement, and that all due consideration has been given to methods and materials that minimize flood damages during the design flood and create no additional threats to public safety.

(5) Restrictions. The City Council shall not issue a variance for any proposed development in a floodway if any increase in flood levels would result during the design flood discharge.

(6) Considerations. In reviewing applications for variances, the City Council shall consider all technical evaluations, all relevant factors, all other portions of this section, and each of the following:

(a) The danger that materials and debris may be swept onto other lands resulting in further injury or damage.

(b) The danger to life and property due to flooding or erosion damage.

(c) The susceptibility of the proposed development, including contents, to flood damage and the effect of such damage on current and future owners.

(d) The importance of the services provided by the proposed development to the community.

(e) The availability of alternate locations for the proposed development that are not subject to flooding or erosion.

(f) The compatibility of the proposed development with existing and anticipated development.

(g) The relationship of the proposed development to the comprehensive plan and flood plain management program for that area.

(h) The safety of access to the property in times of flood for ordinary and emergency vehicles.

(i) The expected heights, velocity, duration, rate of rise and debris and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site.

(j) The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, streets and bridges.

(7) Conditions for issuance. Variances shall only be issued by the City Council upon:

(a) a technical showing of good and sufficient cause based on the unique characteristics of the size, configuration or topography of the site;

(b) a determination that failure to grant the variance would result in exceptional hardship by rendering the lot undevelopable;

(c) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, nor create nuisances, cause fraud on or victimization of the public or conflict with existing local laws or ordinances;

(d) a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief; and

(e) notification to the applicant in writing over the signature of the building official that the issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance, and that such construction below the base flood level increases risks to life and property.

(G) Subdivisions

(1) General. Any subdivision proposal, including proposals for manufactured home parks and subdivisions, or other proposed new development in a flood hazard area shall be reviewed to verify all of the following:

(a) all such proposals are consistent with the need to minimize flood damage;

(b) all public utilities and facilities, such as sewer, gas, electric and water systems are located and constructed to minimize or eliminate flood damage; and

(c) adequate drainage is provided to reduce exposure to flood hazards.

(2) Subdivision requirements. The following requirements shall apply in the case of any proposed subdivision, including proposals for manufactured home parks and subdivisions, any portion of which lies within a flood hazard area:

(a) The flood hazard area, including floodways, as appropriate, shall be delineated on tentative and final subdivision plats.

(b) Design flood elevations shall be shown on tentative and final subdivision plats.

(c) Residential building lots shall be provided with adequate buildable area outside the flood hazard area.

(d) The design criteria for utilities and facilities set forth in this section, Section 25-12-53 (*Flood Loads*), ASCE 24, the City of Austin Drainage Criteria Manual, and applicable FEMA design criteria shall be met.

(H) Site Improvement

(1) Development in floodways. Development or land disturbing activity shall not be authorized in the floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed and sealed by a Professional Engineer licensed by the State of Texas in accordance with the City of Austin Drainage Criteria Manual, that the proposed encroachment will not result in any increase in the level of the design flood.

(2) Sewer facilities. All new or replaced sanitary sewer facilities, private sewage treatment plants (including all pumping stations and collector systems) and on-site waste disposal systems shall be designed in accordance with Chapter 7, ASCE 24, to minimize or eliminate infiltration of floodwaters into the facilities and discharge from the facilities into floodwaters, or impairment of the facilities and systems.

(3) Water facilities. All new replacement water facilities shall be designed in accordance with the provisions of Chapter 7, ASCE 24, to minimize or eliminate infiltration of floodwaters into the systems.

(4) Storm drainage. Storm drainage shall be designed to convey the flow of surface waters to minimize or eliminate damage to persons or property.

(5) Streets and sidewalks. Streets and sidewalks shall be designed to minimize potential for increasing or aggravating flood levels.

(I) Manufactured Homes

(1) Elevation.

(a) All new and replacement manufactured homes to be placed or substantially improved in a flood hazard area shall be elevated such that the lowest floor of the manufactured home is elevated to a minimum of two feet above the design flood elevation. Elevation certification required by Section 25-12-53(D) (*Flood hazard documentation*) shall be submitted to the building official.

(b) The bottom of the frame of new and replacement manufactured homes on foundations that conform to the requirements of Section 25-12-53(C)(1) (*Elevation Requirements*), as applicable, shall be elevated to or above the elevations specified in Section 25-12-53(C)(1) (*Elevation Requirements*). The anchor and tie-down requirements of the applicable state or federal requirements shall apply. The foundation and anchorage of manufactured homes to be located in identified

floodways shall be designed and constructed in accordance with ASCE 24.

(2) Foundations. All new and replacement manufactured homes, including substantial improvement of existing manufactured homes, shall be placed on a permanent, reinforced foundation that is designed in accordance with Section 25-12-53 (*Flood Loads*).

(3) Anchoring. All new and replacement manufactured homes to be placed or substantially improved in a flood hazard area shall be installed using methods and practices which minimize flood damage. Manufactured homes shall be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. Methods of anchoring are authorized to include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.

(4) Protection of mechanical equipment and outside appliances. Mechanical equipment and outside appliances shall be elevated a minimum of two foot above the design flood elevation to or above the design flood elevation.

Exception. Where such equipment and appliances are designed and installed to prevent water from entering or accumulating within their components and the systems are constructed to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding up to the elevation required by Section 25-12-53(C)(1) (*Elevation Requirements*), the systems and equipment shall be permitted to be located below the elevation required by 25-12-53(C)(1) (*Elevation Requirements*). Electrical wiring systems shall be permitted below the design flood elevation provided they conform to the provisions of NFPA 70.

(5) Enclosures. Fully enclosed areas below elevated manufactured homes shall comply with the requirements of 25-12-53(C) (*Design and Construction*).

(J) Recreational Vehicles

(1) Placement prohibited. The placement of recreational vehicles shall not be authorized in floodways.

(2) Temporary placement. Recreational vehicles in flood hazard areas shall be fully licensed and ready for highway use; and shall be placed on a site for less than 180 consecutive days.

(3) Permanent placement. Recreational vehicles that are not fully licensed and ready for highway use, or that are to be placed on a site for more than 180 consecutive days, shall meet the requirements of Subsection (I) (*Manufactured Homes*) for manufactured homes.

(K) Tanks. Underground and above-ground tanks shall be designed, constructed, installed and anchored in accordance with ASCE 24.

(L) Foundation design and construction. This subsection applies to a building or structure subject to Article 11 (*Residential Code*).

(1) A foundation wall in a building or structure erected in a flood hazard area shall meet the requirements in Residential Code, Chapter 4 (*Foundations*).

Exception: Unless designed consistent with Residential Code, Section R404 (*Foundation and Retaining Walls*):

(a) the unsupported height of a 6-inch (152 mm) plain masonry wall shall not exceed 3 feet (914 mm);

(b) the unsupported height of an 8-inch (203 mm) plain masonry wall shall not exceed 4 feet (1219 mm); and

(c) the unsupported height of an 8-inch (203 mm) reinforced masonry wall shall not exceed 8 feet (2438 mm).

(2) For purposes of the exception in (1), unsupported height is measured from the finished grade of the under-floor space to the top of the wall.

**§ 25-12-55 OFFENSE AND PENALTY.**

(A) A person who violates this article commits a separate offense for each day the violation continues.

(B) A person who fails to comply with a permit or variance granted pursuant to this article commits a separate offense for each day the violation continues.

(C) A person who violates this article or fails to comply with a permit or a variance granted pursuant to this article commits a misdemeanor punishable as set forth in Section 25-1-462 (*Criminal Enforcement*).

**PART 5.** City Code Sections 25-7-92(C)(3) (*Encroachment on Floodplain Prohibited*); 25-7-93(B)(2) (*General Exceptions*); 25-7-94 (C)(2) and (E) (*Requirements in Central Business Area*); 25-7-96(D)(2) (*Requirements in the 25-Year Floodplain*); and 25-7-

152(E)(2)(d) (*Dedication of Easements and Rights-of-Way*) are amended to replace certain references to read as follows:

**§ 25-7-92 ENCROACHMENT ON FLOODPLAIN PROHIBITED.**

(C) The director may grant a variance to Subsection (A) or (B) if the director determines that:

(3) a proposed building complies with the requirements in Chapter 25-12, Article 3 (*Flood Hazard Areas*) [~~Article 1, Section 25-12-3 Appendix G (*Flood Resistant Construction*) and Section 1612 (*Flood Loads*)~~];

**§ 25-7-93 GENERAL EXCEPTIONS.**

(B) To be approved under this section, development must:

(2) comply with the requirements in Chapter 25-12, Article 3 (*Flood Hazard Areas*) [~~Article 1, Section 25-12-3 Appendix G (*Flood Resistant Construction*) and Section 1612 (*Flood Loads*)~~];

**§ 25-7-94 REQUIREMENT IN CENTRAL BUSINESS AREA.**

(C) A development application with a proposed building or parking area that encroaches on the 100-year floodplain may be approved if:

(2) normal access to that building is by direct connection with an area above the regulatory flood datum, as defined in Chapter 25-12, Article 3 (*Flood Hazard Areas*) [~~by Chapter 25-12, Article 1 (Building Code)~~];

(E) A development application that may be approved under this section must comply with the flood proofing requirements in Chapter 25-12, Article 3 (*Flood Hazard Areas*) [~~of Chapter 25-12, Article 1 (Building Code)~~].

**§ 25-7-96 REQUIREMENTS IN THE 25-YEAR FLOODPLAIN.**

(D) To be approved under this section, development must:

(2) comply with the requirements in Chapter 25-12, Article 3 (*Flood Hazard Areas*) [~~Article 1, Section 25-12-3 Appendix G (*Flood Resistant Construction*) and Section 1612 (*Flood Loads*)~~];

**§ 25-7-152 DEDICATION OF EASEMENTS AND RIGHTS-OF-WAY.**

(E) For property in the full-purpose limits of the city, the director may grant a variance to Subsection (A) if the director determines:

(2) the development:

(d) is a non-conforming use, as defined by Chapter 25-12, Article 3 (*Flood Hazard Areas*) [~~Article 1, Appendix G, Section G102.3 (*Nonconforming Uses*)~~].

**PART 6**. For the changes in Part 5, City Council waives the requirements regarding amendments in City Code Section 25-1-501 (*Initiation of Amendment*) and Section 25-1-502 (*Amendment; Review*).

**PART 7**. This ordinance takes effect on September 1, 2021.

**PASSED AND APPROVED**

§
§
June 3, 2021 §

Steve Adler
Mayor

**APPROVED:** Anne L. Morgan by NT
Anne L. Morgan
City Attorney

**ATTEST:**
Jannette S. Goodall
City Clerk